

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An electrically conductive adhesive for the improvement of the adherence of active electrode materials to conventional current collectors, comprising ~~characterized in that it comprises~~ an aqueously dispersed fluoropolymer, an amine or ammonium salt of a perfluorocarboxylic acid, and a conductive material.
2. (currently amended) The adhesive according to claim 1, ~~characterized in that~~ wherein the fluoropolymer is a terpolymer.
3. (currently amended) The adhesive according to claim 1 ~~or claim 2, characterized in that~~ wherein the fluoropolymer is selected from the group consisting of tetrafluoroethylene (TFE), hexafluoropropylene (HFP), and vinylidene fluoride (VDF) and perfluorovinylether.
4. (currently amended) The adhesive according to ~~any of the claims 1 to 3, characterized in that~~ claim 1, wherein the perfluorocarboxylic acid is a mono- or dicarboxylic acid that has more than 6 carbon atoms ~~C-atoms~~.
5. (currently amended) The adhesive according to ~~any of the claims 1 to 4, characterized in that~~ claim 1, wherein the amine is selected from the group consisting of RNH₂, H₂NR-NH₂, and R-(NH₂)₃, wherein R ~~[[=]]~~ is alkyl, aryl, or cycloalkyl.
6. (currently amended) The adhesive according to ~~any of the claims 1 to 5, characterized in that it comprises an additional~~ claim 1, further comprising a dispersing agent.
7. (currently amended) The adhesive according to ~~any of the claims 1 to 6, characterized in that it comprises~~ claim 6, wherein the dispersing agent is a copolymer on the basis of vinyl pyrrolidone/(meth)acrylic acid copolymer or that is optionally used aqueous as

ammonium salt thereof.

8. (currently amended) The adhesive according to ~~any of the claims 1 to 7, characterized in that~~ claim 1, wherein the conductive material is selected from the group consisting of carbon black, graphite, and electrically conductive organic materials.
9. (currently amended) The adhesive according to ~~any of the claims 1 to 8, characterized in that~~ claim 1, wherein the ~~aqueous dispersion of the adhesive comprises~~ a polymer content ~~of is~~ 5 – 50 percent by weight, ~~preferably 5 – 30 percent by weight, and in particular 5 – 20 percent by weight.~~
10. (currently amended) The adhesive according to ~~any of the claims 1 to 9, characterized in that the amounts of~~ claim 1, wherein the amount of the conductive material present is the ~~electrically conductive additives are~~ 2 – 30 percent by weight, ~~preferably 4 – 20 percent by weight, and in particular about 5 – 15 percent by weight.~~
11. (currently amended) The adhesive according to ~~any of the claims 1 to 10, characterized in that it comprises additional~~ claim 1, further comprising one or more additives selected from the group consisting of MgO, Al₂O₃, B₂O₃, ~~and~~ H₃BO₃ and alizarin.
12. (currently amended) The adhesive according to claim 11, ~~characterized in that~~ wherein the additive content ~~with regard to MgO, Al₂O₃, B₂O₃, H₃BO₃ that are utilized if necessary,~~ is 0.5 – 5 percent by weight.
13. (canceled)
14. (currently amended) An electrode comprising a current collector, an adhesive according to claim 1, and an active electrode material, ~~characterized in that the adhesive is defined according to any of the claims 1 to 13.~~
15. (currently amended) The electrode according to claim 14, ~~characterized in that it exhibits~~ wherein the electrode has a multilayer set-up.

16. (currently amended) The electrode according to claim 14 ~~or claim 15~~, wherein ~~characterized in that~~ the active electrode material ~~represents~~ is an active cathode material.
17. (currently amended) The electrode according to claim 16, ~~whereby~~ wherein the active electrode material comprises a transition metal oxide, ~~in particular Co^{III}-oxide, Ni^{II}-oxide, Mn^{IV}-oxide, a tungstate, a molybdate, a titanate, Fe^{III}-phosphate, a ferrate, or a chromate.~~
18. (currently amended) The electrode according to claim 17, ~~whereby~~ wherein the transition metal oxide is a Li/transition metal mixed oxide.
19. (currently amended) The electrode according to ~~any of the claims 16 to 18~~, ~~whereby~~ claim 16, wherein the lithium is present intercalated in the active cathode material.
20. (currently amended) The electrode according to claim 14 ~~or claim 15~~, ~~characterized in that~~ wherein the active electrode material ~~represents~~ is an active anode material.
21. (currently amended) The electrode according to claim ~~claims~~ 20, ~~whereby~~ wherein the active anode material is selected from the group consisting of graphite, carbon, carbon black, and fibers.
22. (currently amended) The electrode according to claim 20 ~~or claim 21~~, ~~whereby~~ wherein the active anode material is present in a form capable of intercalation, ~~in particular for lithium.~~
23. (currently amended) The electrode according to ~~any of the claims 14 to 22~~, ~~characterized in that~~ claim 14, wherein the current collector comprises an electrically conductive polymer, a synthetic material filled with an electrically conductive material, or a metal.
24. (currently amended) The electrode according to ~~any of the claims 14 to 23~~, ~~characterized in that~~ claim 14, wherein the current collector is shaped in form of a film, fiber, mat, or mesh.
25. (currently amended) A secondary battery comprising at least one anode and one cathode,

and at least one separator, ~~characterized in that~~ wherein the at least one electrode anode or cathode is ~~defined~~ an electrode according to ~~any of the claims~~ claim 14 to 24.

26. (currently amended) The secondary battery according to claim 25, ~~whereby~~ wherein the battery is a lithium or lithium-polymer battery.
27. (currently amended) A method for the production of an electrode comprising a current collector, an adhesive, and an active electrode material, comprising the following steps:

~~characterized in that~~

~~it comprises the following steps:~~

providing an aqueous dispersion of an adhesive according to claim 1 ~~any of the claims 1 to 12;~~

producing a mixture of the aqueous dispersion with ~~the~~ an active electrode material;

applying the mixture to a surface of a current collector; and

drying ~~of~~ the applied mixture.

28. (currently amended) The method according to claim 27, further comprising ~~additionally~~ the step of degreasing the current collector before the step of applying the aqueous dispersion of the adhesive.
29. (new) The adhesive according to claim 1, wherein the fluoropolymer has a melting point of 140°C or more.
30. (new) The adhesive according to claim 11, wherein the additive is microencapsulated.
31. (new) The adhesive according to claim 30, wherein the diameter of the microcapsules is

0.01 to 1000 microns.

32. (new) The adhesive according to claim 30, wherein the polymer wall of the microcapsules has a thickness of 0.001 to 100 microns.
33. (new) The adhesive according to claim 30, wherein the microcapsule amount polymer wall of the microcapsules has a thickness of 0.001 to 100 microns.
34. (new) The electrode according to claim 17, wherein the active electrode material comprises a transition metal oxide selected from the group consisting of Co^{III}-oxide, Ni^{II}-oxide and Mn^{IV}-oxide.
35. (new) The electrode according to claim 22, wherein the active anode material is present in a form capable of intercalation with lithium.